



Disaster Preparedness *Hazards and Threats*



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Your emergency supplies kit should include supplies to last each person in your household at least three days:

Three gallons of water per person

Canned or packaged food

Battery-powered radio

First aid kit

Flashlight

Manual can opener

Extra batteries

Toiletries

Blankets or sleeping bags

Prescription medications

Special items for infant, elderly or disabled members of the household

Introduction

Life is full of unforeseen and unpredictable events that can injure or kill people and damage or destroy property. We don't know when emergencies or disasters will occur, but if we plan ahead and know what to do before disasters happen, we'll be better prepared to face them. This planning is called emergency preparedness.

Emergency preparedness is a responsibility that begins with each individual. Steps you can take to keep your family safe during emergencies include: building an emergency supply kit and making a family emergency plan.

Store important papers — such as birth certificates, Social Security cards, driver's license and similar documents — in a waterproof bag. In the event you need to leave home, take this bag with you.

For possible insurance claims, make an inventory of your belongings to prove ownership and to establish dollar values of items. Take photographs for documentation.

In your inventory, list purchase dates, prices, serial numbers and identifying features of appliances, jewelry, computers and other valuables. Keep one copy at home and another copy in a safe deposit box or other safe place outside your home.



Your **family emergency plan** includes discussing with your family, friends and neighbors the types of disasters and emergencies that are most likely to happen and what to do in each case. Take a Community Emergency Response Team, first aid, CPR or other class so that you have the knowledge to help yourself and others if needed.

If you need to leave your home in an emergency, decide in advance where you and your family will meet in case you can't return home. Keep a record of the location, phone number and the phone numbers of your family with you at all times. Keep a travel kit packed with comfortable, sturdy shoes and clothing, extra eyeglasses and at least a three-day supply of medications if needed. Make special transportation arrangements for those with special needs now – don't wait for an emergency.

Often it's easier to call long distance after a disaster, so ask an out-of-town friend or relative to be your contact in case of an emergency. All family members should call this person in an emergency to check in.

When an emergency occurs, follow your plan. Be prepared to evacuate your home if authorities instruct you to do so. Listen to your local

Emergency Alert System radio or television station for information about what you should do. Find your local EAS radio or television station at the Virginia Department of Emergency Management's Web site, www.vaemergency.com, under "Prepare and Prevent," or call VDEM toll-free at (866) 782-3470.

Floods

According to the National Weather Service, flash flooding is the No. 1 weather-related killer in the United States, costing an average of \$3.7 billion annually. FEMA cites flooding as the cause of 90 percent of all natural disaster damage, excluding drought.

Coastal floods occur along shorelines and are usually accompanied by high tides and strong winds during a tropical storm event. River floods happen near waterways that become inundated with heavy rainfall or melting snow upstream. Flash floods result from excessive rainfall in a short period of time, generally less than 6 hours, or a dam failure.

Flood/Flash Watch: flooding is possible in your area. Be alert to signs of flooding and be ready to evacuate on a moment's notice.

Flood/Flash Flood Warning: a flood is already occurring or will occur very soon in your area. Move to higher ground away from rivers, streams, creeks and storm drains. Be sure to turn around if you encounter water moving across the road, or barricades blocking the road. In a flash flood, residents in low-lying areas near streams and rivers should evacuate immediately — you might only have a few minutes to escape.

River Flood Warning: flooding along rivers and/or larger streams has been forecasted, is imminent, or is in progress. It usually occurs 6 hours or later after the causative event, and it is usually associated with widespread heavy rain and/or melting snow or ice jams.

Coastal Flood Watch: coastal flooding is possible in the next 12 to 36 hours.

Coastal Flood Warning: coastal flooding, posing a serious threat to property and possibly life, is occurring, is imminent or is expected in the next 12 to 24 hours.

► **Safety tips:**

- Listen to weather bulletins and follow instructions given by local authorities.
- Know the location of evacuation shelters and safe evacuation routes.
- Don't drive into flooded areas. If floodwaters rise around your car or truck, get out immediately and climb to higher ground.
- Don't walk through moving water. Six inches of moving water can knock you off your feet. If you must walk in a flooded area, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Local, state and federal aid programs are not designed to restore your home to the way it was before the flood. Protect your home with insurance. Most homeowner insurance policies don't cover flood-incurred damages, but coverage is available. Contact your insurance agent and ask about flood insurance for your home and/or its contents.



Hurricanes

A hurricane is the most intense tropical event, with five categories and winds ranging from 74 mph to 155 mph or greater. Hurricane season is June 1 through Nov. 30, but the most active time for hurricanes in Virginia is September.

A hurricane's bands of thunderstorms produce torrential rains, storm surge and sometimes tornadoes. A foot or more of rain could fall in less than a day, causing flash floods and mudslides.

Large rivers in the hurricane's path might flood for days after the storm has passed. The storm's driving winds can topple trees, utility poles and damage buildings. Communication and electricity might be lost for days or weeks, and roads are often impassable due to fallen trees and debris.



Hurricane Watch: The National Hurricane Center issues a hurricane watch to alert specific regions when hurricane conditions are forecasted for the area within the next 36 hours. This watch should trigger your family's disaster plan and you should begin protecting your home and property from the storm. Monitor weather reports via television or radio to stay informed.

Hurricane Warning: The National Hurricane Center issues a hurricane warning when sustained winds of 74 mph or greater are forecasted for the area within the next 24 hours. Take all precautions immediately; your family should already be in the process of securing property and relocating to a safe place to wait out the storm. Monitor weather reports via television or radio to stay informed.

► Safety tips:

- Contact your local emergency manager to find out if your home is in a storm surge flooding zone.
- Know the location of evacuation shelters and safe evacuation routes. The Virginia Department of Transportation has designated evacuation routes for the Hampton Roads area that are available online at www.VirginiaDOT.org.
- Mobile homes are not safe during a hurricane. Leave your mobile home when hurricane conditions exist, and find more substantial shelter.
- Cover all windows with plywood or put up storm shutters.
- Move furniture, tools and loose objects inside.
- Fuel the car for immediate use.
- Listen to radio/TV for weather updates.
- If you have been advised to evacuate, shut off the main water valve and main power switch. Turn off gas only if you suspect a leak or if you are directed to do so by local officials. Only gas utility representatives can turn your gas back on.
- If you haven't been advised to evacuate, stay in your building if it is sturdy and on high ground. Keep away from windows.
- If you live in a low-lying area, you might be in danger from flooding. Be prepared to evacuate immediately if you are instructed to do so by local officials.
- After the storm, be aware that your water could be contaminated, even if you don't get your water from a public utility water system. To be safe, boil water for 15 minutes before drinking. Listen to radio and television broadcasts on the condition of water in your area and follow the advice of local health officials.

Man-made Threats

Biological Attack

A biological attack is the deliberate release of germs or other biological substances that can harm you. Many agents must be inhaled, enter through a cut in the skin or be eaten to harm you. Emergency officials will alert you if there is a biological attack in your area.

- If a family member becomes sick, it is important to be suspicious, but do not assume that any illness is the result of the biological attack. Symptoms of many common illnesses overlap.
- Follow instructions of doctors and public health officials.

If you become aware of an unusual or suspicious substance nearby, leave the area quickly. Cover your mouth and nose with two to three layers of cotton such as a t-shirt, handkerchief or towel. Wash with soap and water. Contact authorities and watch your local media for information from emergency officials. If you become sick, seek emergency medical attention.

Chemical Attack

A chemical attack is the deliberate release of a toxic substance that can poison people and the environment. Possible indicators include watery eyes, twitching, choking, trouble breathing or loss of coordination. Many sick or dead birds, fish or small animals are also cause for suspicion. If you see signs of chemical attack:

- Find an area with clean air quickly.
- If you are inside, get out without passing through the contaminated area. If you can't get out of the

building or find clean air without passing through the contaminated area, move as far away as possible and take shelter.

- If you are outside, quickly decide what is the fastest way to find clean air – either get out of the area or go inside the closest building and take shelter.
- If you think you might have been exposed to a chemical release, strip immediately and wash. Look for any source of water and wash with soap if possible, being sure not to scrub the chemical into your skin.
- Seek emergency medical attention.

Explosion

- Take shelter under or against anything that will protect you from debris.
- Exit the building as soon as possible.
- Do not use elevators.
- Check for fire and other hazards. If there is fire, crawl low under smoke, covering your nose and mouth. Feel doors before opening them. If a door is hot, do not open it – look for another way out.
- Take your emergency supply kit if time allows and go to your pre-designated meeting place.
- If you are trapped in debris, use a flashlight, tap on a pipe or wall, or use a whistle to signal your location to rescuers. Avoid movement that will kick up dust or shouting that will cause you to inhale dust.

Nuclear Blast

A nuclear blast is an explosion with intense light and heat, a damaging pressure wave and widespread radioactive material that can contaminate the air, water and ground surfaces for miles around. **During a nuclear incident, it is important to avoid radioactive material, if possible.**

- If you can get out of the area, leave quickly. If not, take shelter as far below ground as possible, close windows and doors, and turn off air conditioners, heaters or other ventilation systems. Stay there and listen to local media for instructions from emergency officials.

Radiological threat

A radiological threat, commonly referred to as a "dirty bomb" or "radiological dispersion device," is the use of common explosives to spread radioactive materials over a targeted area. It is not a nuclear blast. As with any radiation, limit exposure and avoid breathing radiological dust.

- If you are outside during a nearby explosion or release, cover your nose and mouth and quickly go inside a building that has not been damaged. If you are already inside, check to see if your building has been damaged. If your building is stable, stay where you are.
- If you are inside and there is an explosion or release inside your building, cover your nose and mouth and go outside immediately. Look for a building or other shelter that has not been damaged and quickly get inside.



- Once you are inside, close windows and doors. Turn off air conditioners, heaters or other ventilation systems.
- If you think you have been exposed to radiation, strip and wash as soon as possible.

Stay where you are and listen to local media for instructions.

After a nuclear blast or radiological release, it is important to put as much shielding and distance between you and the radiation as possible and minimize time spent exposed.

Thunderstorms

Thunderstorms can occur any time of day year round, but are most common in the summer afternoons and evenings. All thunderstorms produce lightning, which can be deadly. Virginia averages 35 to 45 thunderstorm days per year.

Severe Thunderstorm Watch: conditions are favorable for the formation of a severe thunderstorm. The National Weather Service considers a thunderstorm severe if it produces hail at least three-quarters of an inch in diameter, produces a tornado or has winds of 58 mph or higher.

Severe Thunderstorm Warning: a severe thunderstorm has been sighted or has been indicated on NWS Doppler radar.

► Safety tips:

If you find yourself outside during a thunderstorm:

- Find shelter immediately — lightning can travel up to 15 miles away from a storm. Sturdy buildings are the safest place to be. If no sturdy buildings are nearby, get into a hardtop vehicle with closed windows and don't touch metal surfaces.
- If there is no shelter nearby, stay at least twice as far away from solitary trees as they are tall. If you are caught in an open field, crouch down with your hands over your ears, making yourself as small a target as possible, and wait for the storm to pass.
- Avoid sheds, tents, picnic shelters, baseball dugouts, goal posts and bleachers — they don't provide adequate protection and even attract lightning strikes due to their metal construction. Drop metal objects such as fishing poles, golf clubs and tennis rackets. Groups of people in the open are larger targets for lightning — get people to move away from each other and crouch down, covering their ears.
- Get out of the water and find shelter. Anyone protruding from the flat surface of the water provides a prime target for lightning, so if you cannot reach the shore, stay as far under water as possible, for as long as possible. Indoor swimming pools are no safer than outdoor pools; they are connected to a large underground network of pipes and wires, which are perfect conduits for electricity.
- Boats do not protect you from lightning. Boats protrude from the flat surface of the water and provide a target for lightning. If you can't make it back to shore, put on your life vest and get in the center of the cabin, away from electrical devices and metal surfaces. If there is no cabin, crouch down in the bottom of the boat, and stay as low as possible. Tie down any antennae and keep from touching metal objects.

Tornadoes

A tornado is a violently rotating column of air extending from a thunderstorm to the ground. Strong tornadoes can reach an awesome intensity, with wind speeds exceeding 200 mph and sometimes even approaching 300 mph. Tornadoes are highly unpredictable, appearing separately or in clusters and varying greatly in length, width, direction of travel and speed.

Tornadoes commonly develop from severe thunderstorms but can also accompany tropical storms and hurricanes as they move onto land.

Though tornadoes can strike at any time, in Virginia they most commonly occur from April to October.

Tornado Watch: conditions are favorable for a tornado and that tornadoes are possible.

Tornado Warning: a tornado has been sighted or has been indicated by NWS Doppler radar and might be headed your way. When a warning is issued, take cover immediately.



► Safety tips:

- Go to the center part of the lowest level of your home — the basement, an interior hallway, closet or bathroom — away from all windows, doors and outside walls,

OR

- Get under the stairs or a sturdy piece of furniture.
- Cover your body with a blanket or sleeping bag to protect yourself against flying debris.
- If you are in a mobile home, get out and find sturdy shelter elsewhere.
- Avoid buildings with wide-span roofs such as gymnasiums or theaters.
- Avoid windows. Opening windows does nothing to reduce damage from a tornado. Don't worry about the windows; worry about finding shelter and protecting yourself.
- Get out of your truck or car, find a ditch that isn't flooded, and lie flat with your arms protecting your head.

Winter Storms

Winter storms range from ice and snow to blizzards with high winds, blowing snow and freezing temperatures. They can cause circumstances harmful to homes and businesses, such as power outages, loss of heat and telephone services, strong damaging winds, fallen trees, flooding, icy roadways and freezing temperatures.



Winter Weather

Advisory: winter weather conditions are expected to cause difficulty and might be dangerous. With caution, these situations should not become life threatening.

Winter Storm Watch:

severe winter conditions, such as heavy snow or ice, are possible within the next day or two. Prepare now.

Frost/Freeze Warning: below-freezing temperatures are expected, which might cause significant damage to plants, crops or fruit trees.

Winter Storm Warning: severe winter conditions have begun or are about to begin in your area. Stay indoors.

Blizzard Warning: snow and strong winds will combine to produce blinding snow with near zero visibility, deep drifts and life-threatening wind chill. Seek shelter immediately.

► Safety tips:

- If you decide to travel in your car, notify someone of your destination and when you expect to arrive.
- Keep your car's fuel tank full and use chains or snow tires. Stay on the main roads. If you get stuck or stalled, stay in your car and wait for help to arrive. Run the engine and heater sparingly and ventilate the car periodically.
- If you must be outside during a winter storm:
- Dress in loose-fitting, lightweight, layered clothing. Nearly half of your body heat escapes through your head, so wear a hat.
- Watch out for hidden patches of ice, falling trees, branches and wires.
- Avoid overexertion and dehydration from walking, pushing cars or shoveling snow. Know the warning signs for frostbite and hypothermia.

Fires

Fires usually start undetected and spread quickly, so be prepared to take fast action. In just two minutes, a fire can become life threatening.

► Safety tips:

- Install at least one smoke detector on every level of your home. Clean and test them once a month and change the batteries at least once a year.
- Purchase a fire extinguisher. Place it in an area of your house that everyone can get to, and teach everyone how to use it.
- Plan your escape route, including a meeting place outside your home, and practice it on a regular basis.

- Post the number for the local fire department by the phone.
- Don't allow flammable materials such as newspapers stack up in your house.
- Use a fire extinguisher or smother the fire with a wet rug or blanket. Only attempt to put out small, contained fires. If the fire is larger than a small trash can, leave the house and call 911.
- Don't use water to put out a grease fire on your stove. Immediately cover the pan with a lid to smother the flames. Keep the lid on until the pan is cool.

Special Needs

Emergencies might require special assistance for a member of your household. Contact your local emergency manager in advance to learn about special transportation, how to notify first responders to your needs, and your local emergency plan. Also contact your home health care provider, local health department, Area Agency on Aging, Social Services or your primary caregiver. Special needs include, but are not limited to:

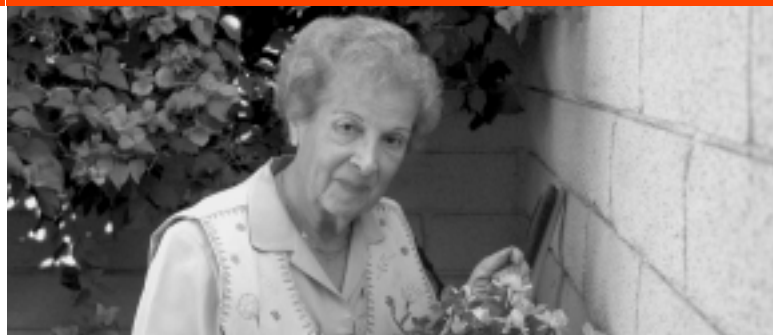
Senior citizens who feel that they might need assistance during an emergency.

Disabled family members who need assistance.

Medical conditions that require special care, equipment or transportation.

Missing Persons

When you suspect a loved one is missing, immediately contact your local police department or sheriff's office. Tell them:



- How long the person has been missing.
- What the person was wearing.
- Whether the person has any health problems or is on any medication.
- Whether you think the person can take care of himself or herself outside the home environment.
- Try not to remove anything or disturb the area where you last saw the person — it might destroy evidence that could help searchers and law enforcement find the missing person.

Disaster Preparedness for Animals

Prepare ahead of time where you will take your pet in the event you need to evacuate to a public shelter. For health and safety reasons, only service animals such as guide dogs are allowed into most public shelters. Contact your local humane society, animal shelter or veterinarian for pet sheltering options.

If you evacuate, even if you think you may be gone only for a few hours, take your animals. Once you leave, you have no way of knowing how long you'll be kept out of the area, and you may not be able to go back for your pets.

Leave early—don't wait for a mandatory evacuation order. An unnecessary trip is far better than waiting too long to leave safely with your pets. If you wait to be evacuated by emergency officials, you may be told to leave your pets behind.

► **Safety tips:**

- Don't leave your pet loose outside during a disaster or emergency. Animals turned loose to fend for themselves are likely to become victims of exposure, starvation, predators, contaminated food or water, or accidents. Leaving dogs tied or chained outside in a disaster is a death sentence. Because they become disoriented and fearful, they may attack people who approach them.
- Make sure your pet's vaccinations are current — particularly for rabies — and that your animal has a properly fitting collar with current license and rabies tags.
- Take photographs of your pet for identification if it is separated from you.
- Make an emergency supplies kit for your pet. Include a carrier or crate, food, water, medication and supplies.



First Aid Procedures

When someone is hurt, you might be frightened or confused about what to do. Be prepared for a medical emergency by taking a first aid, CPR or Community Emergency Response Team course.

The first three steps to take are:

1. **Check the scene for any danger to yourself and check the injured person for breathing and heartbeat.**
2. **Call 911 or the local emergency number.**
3. **Care for the person. Treat life-threatening conditions first.**

CONTROLLING BLEEDING

- Cover the wound with a clean cloth and apply pressure. Add a bandage and raise the wound above the level of the heart if no bone fracture is involved.
- To control severe bleeding from arms or legs, apply direct pressure on the injury, apply pressure to major arteries above the wound and elevate the wound above the heart.
- Tourniquets are a last resort, when no other measure works to stop the bleeding. Make a tourniquet by wrapping a two-inch wide cloth just above the point of the injury and tightening it with a stick. Note the time you applied the tourniquet and do not remove it.
- Any severed body parts should be stored on ice and sent to the hospital with the person for possible reattachment by a surgeon.

TREATING SHOCK

- Symptoms of shock include pale, cool, moist skin; restlessness or irritability; weak, rapid pulse; rapid breathing; disorientation; mental confusion and nausea.
- First, treat the cause of shock such as blood loss, burns and other types of traumatic injuries.
- Keep the person quiet, lying down and covered to maintain comfortable body temperature. Elevate the legs about 12 inches. If you suspect head, neck or back injuries or broken bones involving the hips or legs, don't move the person.
- Reassure the person. If medical help is delayed for more than an hour, give small amounts of water if the person is conscious. Don't feed liquids to a person who is unconscious, nauseous or has abdominal injuries.

TREATING BURNS

When treating a person who has been burned, the initial goals are to:

- Stop the burning process.
- Prevent further trauma.
- Obtain prompt medical care.

First-degree burns are characterized by redness and mild swelling. Immerse the burn in cool water for 15 minutes and then cover with a sterile, dry dressing.

Second-degree burns are characterized by blistering and severe pain. Remove clothing from around the burn, but do not remove clothing stuck to the burned area. Cover burn with a clean, dry, sterile cloth. Second-degree burns should not be covered with moist dressings or soaked in water. Seek prompt medical help.

Third degree burns are characterized by white or charred skin. Remove clothing from around the burn but do not remove clothing stuck to the burned area. Do not immerse burn in water. Cover burn with a clean, dry, sterile cloth and elevate the burned area if possible. Seek prompt medical help.

BROKEN BONES

- Don't move the person unless absolutely necessary. Keep the injured part from moving.
- Apply ice to the injury site.
- Get medical help.
- Support the broken bone with a splint only if the person must be moved. Don't move the limb; immobilize it in the position you find it.
- To soft-splint an injury, support the injured area above and below the place of the injury. Soft materials can be used such as blankets, pillows, etc.

Emergency Numbers

Fire: _____

Police: _____

Hospitals: _____

Red Cross: _____

Family doctors: _____

Local Emergency Manager: _____

The Directory of Local Emergency Managers is available at www.vaemergency.com, or call VDEM at (866) 782-3470.

For More Information Visit These Web Sites:

The Virginia Department of
Emergency Management:

www.vaemergency.com

(Your most up-to-date Web source for
emergency information)

The Virginia Department of Health:

www.vdh.state.va.us

The Federal Emergency
Management Agency:

www.fema.gov

American Red Cross:

www.redcross.org



For more information about this publication
call (866) 782-3470 (toll free)

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